

1,2,3-TRICHLOROPROPANE

Date of Peer Review: October 2002

Glycerol trichlorohydrin Allyl trichloride

96-18-4 CAS#

RTECS# TZ9275000

UN# 2810

EC# 602-062-00-X

C ₃ H ₅ Cl ₃ / CH ₂ ClCHClCH ₂ C	:
Molecular mass: 147.4	

ICSC: 0683

TYPES OF HAZARD / EXPOSURE	ACUTE HAZARDS / SYMPTOMS	PREVENTION	FIRST AID / FIRE FIGHTING	
FIRE	Combustible. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames.	Powder, alcohol- resistant foam, water spray, carbon dioxide.	
EXPLOSION	Above 74°C explosive vapour/air mixtures may be formed. Risk of fire and explosion on contact with metals.	Above 74°C use a closed system, ventilation, and explosion-proof electrical equipment.	In case of fire: keep drums, etc., cool by spraying with water.	
EXPOSURE		AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!	
Inhalation	Cough. Sore throat. Headache. Drowsiness. Unconsciousness.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Artificial respiration may be needed. Refer for medical attention.	
Skin	Dry skin. Redness. Prickling.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.	
Eyes	Redness. Pain.	Safety spectacles, or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.	

Ingestion

Nausea. Headache. Vomiting. Diarrhoea. Drowsiness. Unconsciousness. Do not eat, drink, or smoke during work. Wash hands before eating. Rinse mouth. Do NOT induce vomiting. Give plenty of water to drink. Refer for medical attention.

SPILLAGE DISPOSAL

Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT let this chemical enter the environment. (Extra personal protection: filter respirator for organic gases and vapours.)

PACKAGING & LABELLING

Marine pollutant. **EU Classification**

Symbol: <u>Xn</u> R: <u>20/21/22</u> S: <u>(2-)-37/39</u> Note: [D]

UN Classification UN Hazard Class: 6.1 UN Pack Group: III

EMERGENCY RESPONSE

Transport Emergency Card: TEC (R)-61GT1-I

NFPA Code: H3; F2; R0;

STORAGE

Separated from metals. Cool. Keep in a well-ventilated room.

IPCS International Programme on Chemical

Safety









Prepared in the context of cooperation between the International Programme on Chemical Safety and the Commission of the European Communities © IPCS, CEC 1999

SEE IMPORTANT INFORMATION ON BACK

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IMPORTANT DATA

PHYSICAL STATE; APPEARANCE:

COLOURLESS LIQUID, WITH CHARACTERISTIC ODOUR.

PHYSICAL DANGERS:

The vapour is heavier than air.

CHEMICAL DANGERS:

The substance decomposes on burning producing toxic and corrosive fumes. Reacts violently with metals causing explosion hazard.

OCCUPATIONAL EXPOSURE LIMITS:

TLV: 10 ppm as TWA; (skin); A3; (ACGIH 2002). MAK: Carcinogen category: 2; (DFG 2002).

ROUTES OF EXPOSURE:

The substance can be absorbed into the body by inhalation of its vapour, through the skin and by ingestion.

INHALATION RISK:

A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C.

EFFECTS OF SHORT-TERM EXPOSURE:

The substance is irritating to the eyes and the respiratory tract. The substance may cause effects on the liver and kidneys, resulting in impaired functions. Exposure at high concentrations may result in unconsciousness.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:

This substance is probably carcinogenic to humans.

PHYSICAL PROPERTIES

Boiling point: 156°C Melting point: -14°C

Relative density (water = 1): 1.4

Solubility in water: none

Vapour pressure, kPa at 20°C: 0.29

Relative vapour density (air = 1): 5.1

Relative density of the vapour/air-mixture at 20°C

(air = 1): 1.01 Flash point: 74°C

Auto-ignition temperature: 304°C Explosive limits, vol% in air: 3.2-12.6

Octanol/water partition coefficient as log Pow:

2.27

ENVIRONMENTAL DATA

The substance is harmful to aquatic organisms. This substance may be hazardous to the environment; special attention should be given to ground water contamination.

NOTES

Do NOT take working clothes home.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the CEC nor the IPCS nor any person acting on behalf of the CEC or the IPCS is responsible for the use which might be made of this information

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See Also:

Toxicological Abbreviations

Trichloropropane, 1,2,3- (CICADS 56, 2003)

Trichloropropane, 1,2,3- (IARC Summary & Evaluation, Volume 63, 1995)